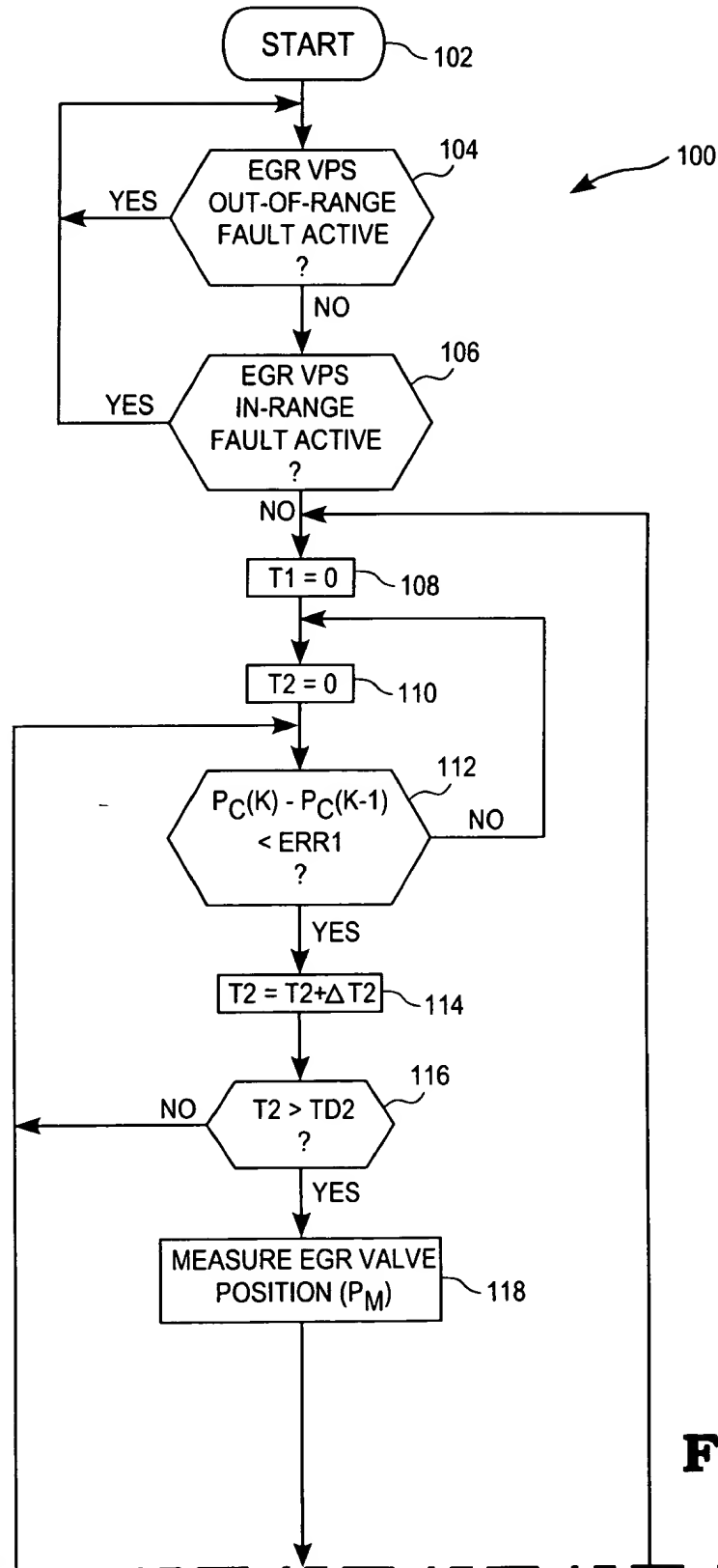


FIG. 1



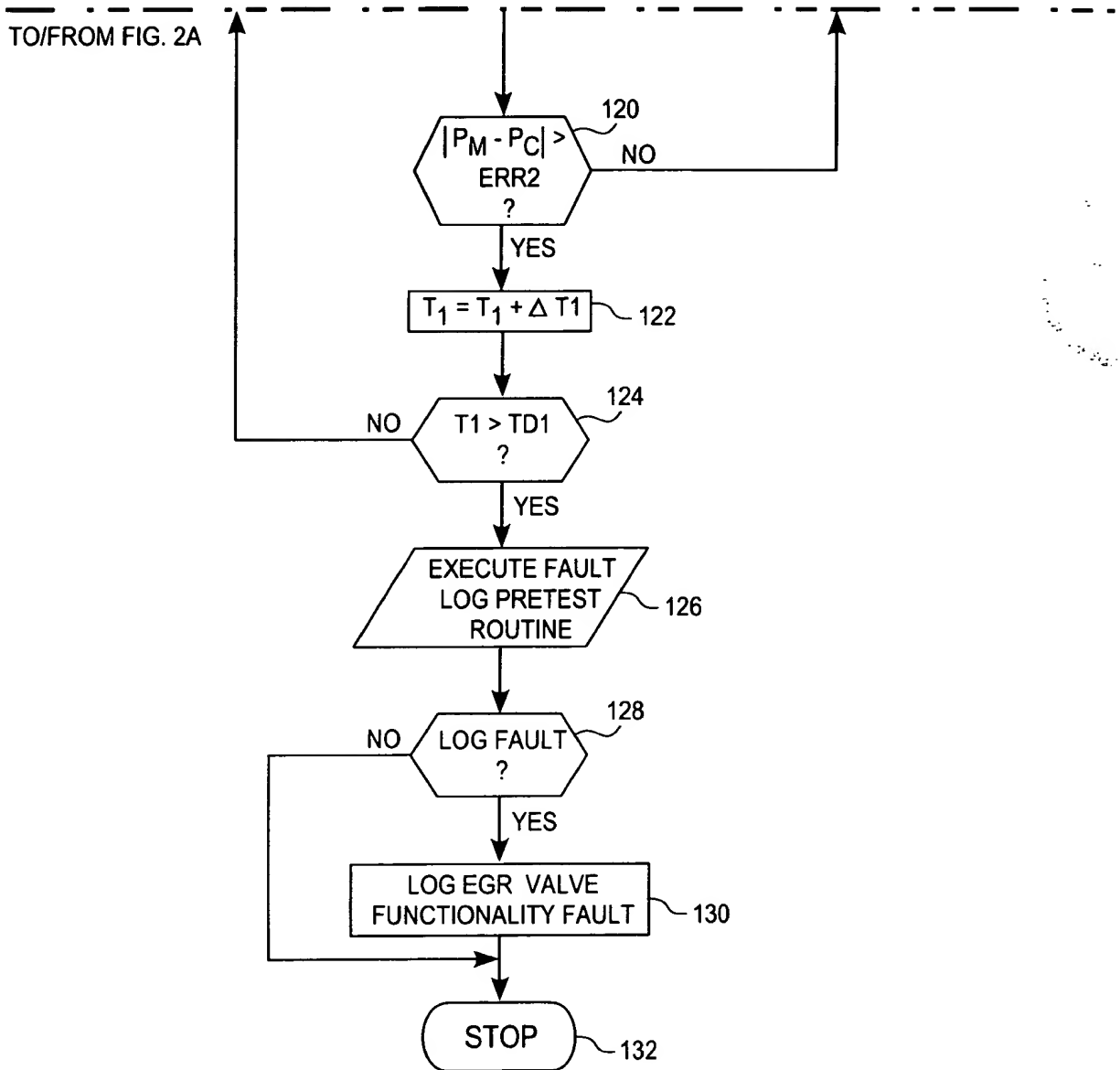


FIG. 2B

INVENTORS: YUE YUN WANG, ET AL.
ATTORNEY DOCKET NO.: 29766-67966

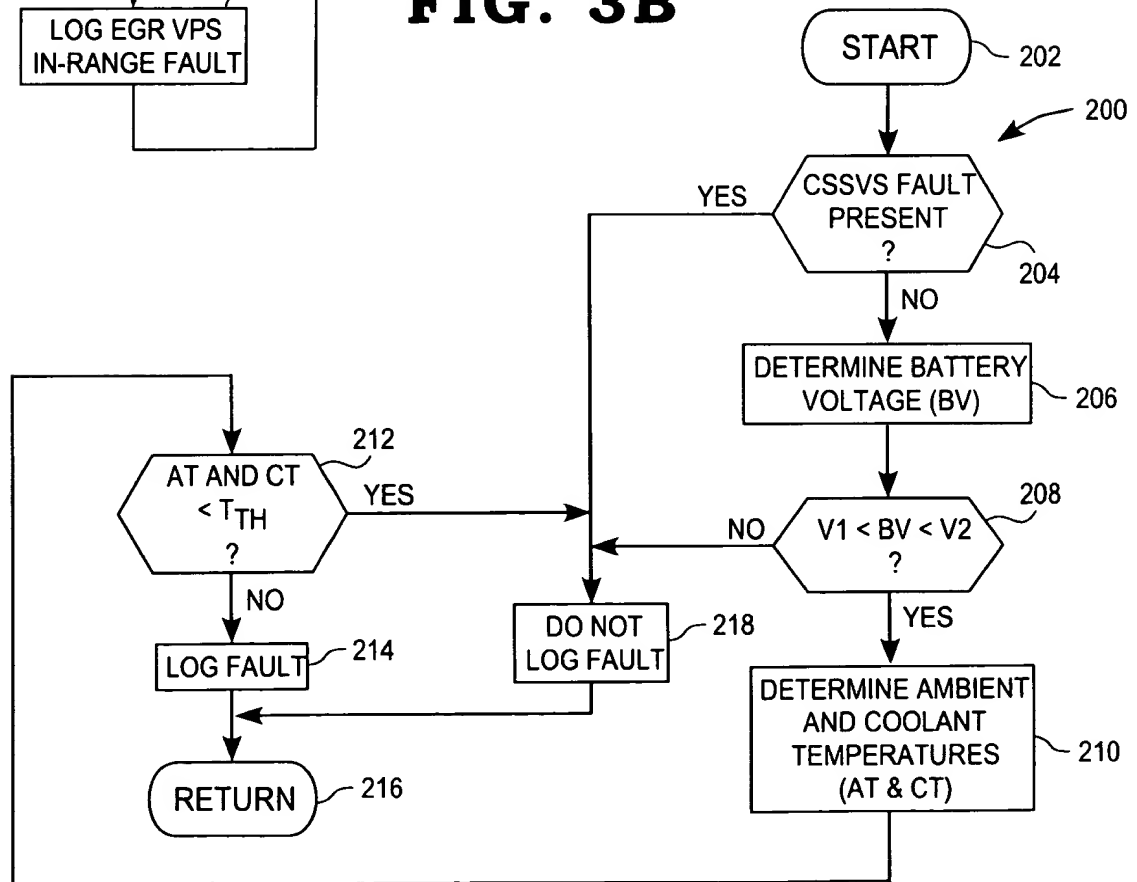
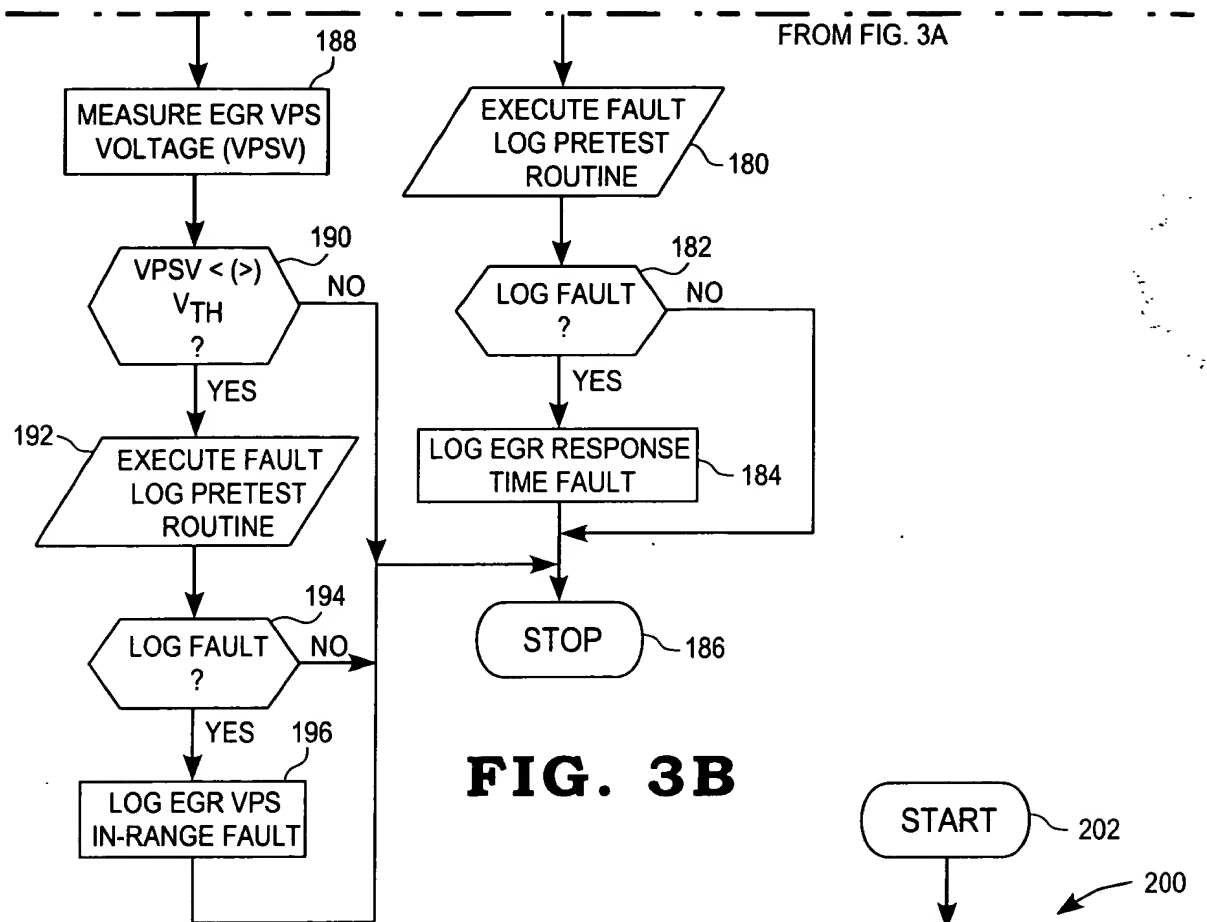
```

graph TD
    152([START]) --> 154{{EGR VPS  
OUT-OF-RANGE  
FAULT ACTIVE?  
154}}
    154 -- YES --> 152
    154 -- NO --> 156[MEASURE EGR VALVE  
POSITION (P_M)  
156]
    156 --> 158{{EGR VALVE  
COMMANDED FROM  
FULLY CLOSED (OPEN) TO  
FULLY OPEN (CLOSED)  
?  
158}}
    158 -- NO --> 152
    158 -- YES --> 160[RESET TIMER  
160]
    160 --> 162
    subgraph 162 [ ]
        164[MEASURE EGR VALVE  
POSITION (P_M)  
164] --> 166{{P_M = FULLY  
OPEN (CLOSED)  
?  
166}}
        166 -- NO --> 164
        166 -- YES --> 168{{TIMER VALUE  
> ΔT1  
?  
168}}
        168 -- NO --> 164
        168 -- YES --> 170
    end
    subgraph 170 [ ]
        172{{TIMER VALUE  
> ΔT1  
?  
172}} -- NO --> 168
        172 -- YES --> 174[MEASURE EGR VALVE  
POSITION (P_M)  
174]
        174 --> 176{{|P_OPEN (CLOSED)  
- P_M| > D_TH  
?  
176}}
        176 -- NO --> 172
        176 -- YES --> 168
    end
    170 --> 178{{TIMER VALUE  
> ΔT2  
?  
178}}
    178 -- NO --> 168
    178 -- YES --> 179([TO FIG. 3B])

```

FIG. 3A

FIG. 3A



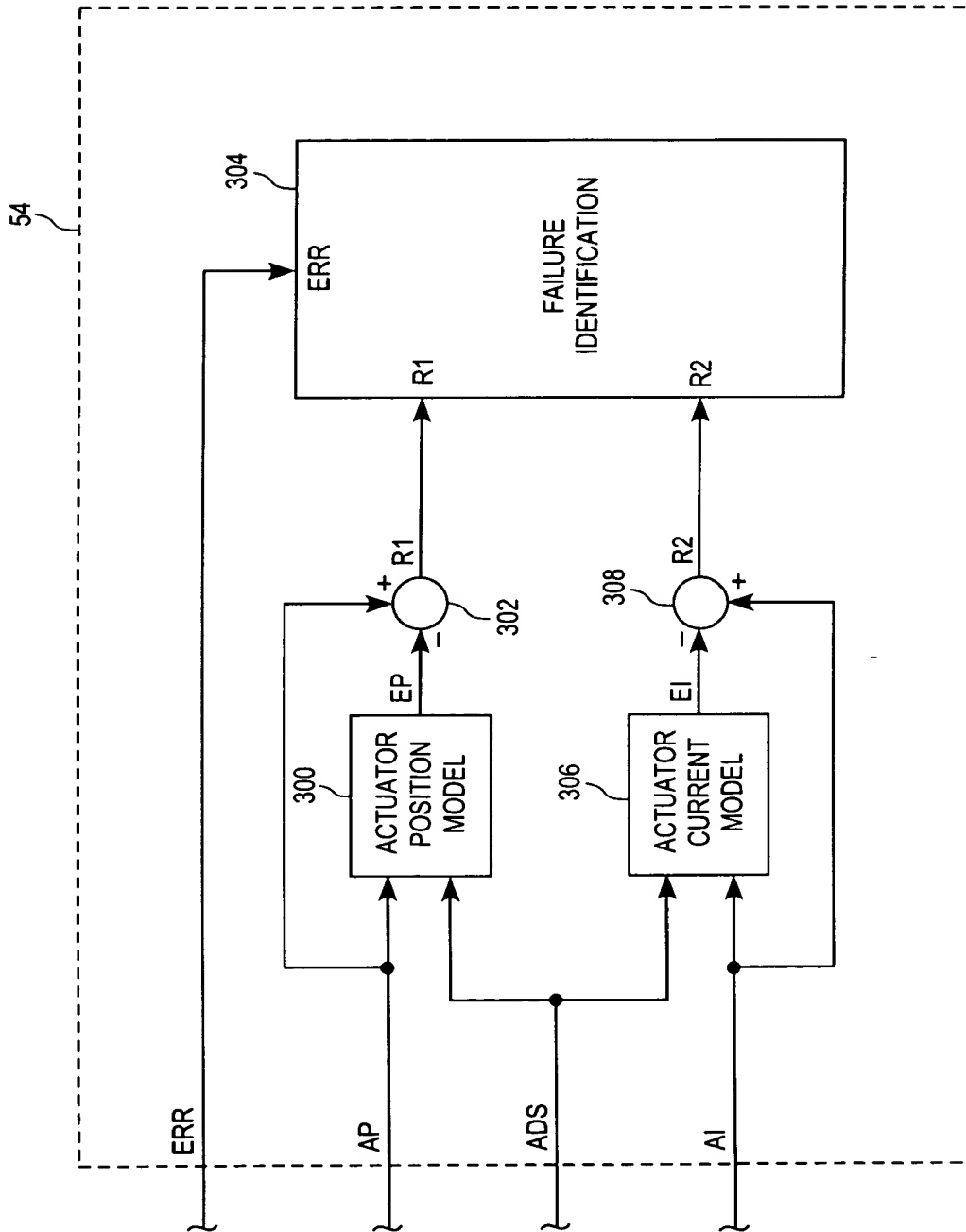


FIG. 5

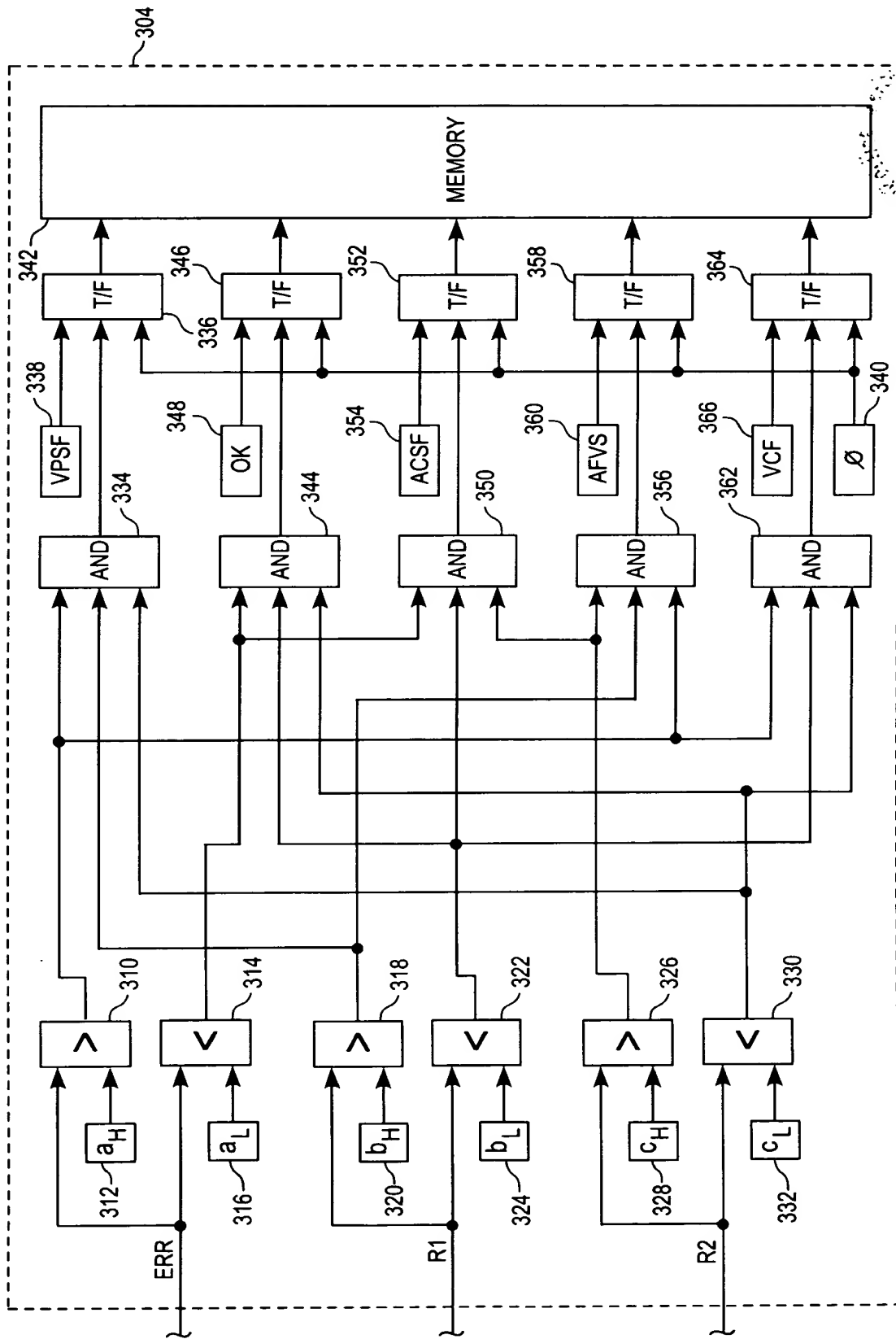


FIG. 6